

# Saudi Arabia: Perspectives on Oil Policy

National Intelligence Council Memorandum

Secret

NIC M 81-10013 November 1981

Copy 195





# Saudi Arabia: Perspectives on Oil Policy

National Intelligence Council Memorandum

Information available as of 24 November 1981 was used in the preparation of this Memorandum.

This Memorandum was coordinated within the National Intelligence Council and the National Foreign Assessment Center. Comments are welcome and should be addressed to its authors,

of the Analytic

Group of the National Intelligence Council

Secret NIC M 81-10013 November 1981

## Saudi Arabia: Perspectives on Oil Policy

#### Summary

Saudi Arabia's major oil policy decisions—pricing, production level, and capacity—appear aimed at maximizing and protecting its oil-derived wealth over the long run. This objective requires the Saudis to consider a wide range of economic, financial, political, and military considerations. Although we do not know the weight the Saudis attach to each of these factors, their actions appear designed to obtain the largest possible flow of revenues over time. Riyadh avoids politically inspired oil decisions that could seriously impair its economic and financial interests. It has never, apart from 1973, used the "oil weapon" bluntly as an instrument of punishment or reward to achieve political ends, such as a favorable resolution of the Arab-Israeli conflict or improved access to sophisticated Western arms.

Saudi decisions on pricing and production levels in recent years have coincided with those desired by the oil-importing countries, because both sides have had an interest in preventing explosive price runups. The oil-importing countries want to avoid the devastating political and economic consequences of such price rises, while the Saudis, seeking to ensure a market for their vast oil reserves well into the future, want to keep major users from turning more rapidly to other sources of energy. In this regard, Saudi interests are now more complementary to the interests of oil-importing countries than to those of OPEC states with rapidly depleting oil reserves and large populations (such as Nigeria, Indonesia, Algeria, and Iran), which seek to extract maximum revenues in the short run.

The Saudis nonetheless exploit their position as the world's largest oil	
exporter in a more subtle fashion. They play on popular anxieties about	
possible resort to the "oil weapon" 25X1	
Riyadh also likes to portray as "favors" to the West oil decisions	•
taken in Saudi self-interest	

The Saudis might still, under extreme circumstances, use oil policy to exert political pressure. The threshold above which Riyadh might do so, however, is probably higher now than it was in 1973. In the intervening years, the Saudis have gained additional understanding of the limitations of the "oil weapon" and have acquired a much larger financial and strategic stake in avoiding oil policies that might hurt the West. Specifically, Riyadh shares with the West an interest in:

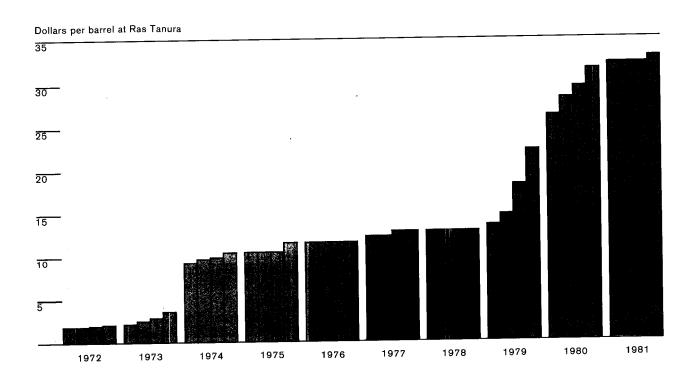
• Protecting Saudi Arabia's security—with the help of the West—from possible moves by the Soviet Union or other hostile forces.

Secret

iii

- Avoiding circumstances under which the West might feel compelled to seize Saudi Arabia's oilfields or its enormous foreign assets.
- Preventing a deterioration of the industrial world's economic health to the point at which Saudi oil revenues would fall off sharply or the value of Saudi foreign assets would erode significantly.

# Saudi Arabian Oil Prices, by Quarter, 1972-81



585784 11-81 25X1

## Saudi Arabia: Perspectives on Oil Policy

The importance of Saudi Arabia understandably has evoked an avalanche of assessments of the motives behind Riyadh's energy and foreign policy decisions. Just as understandably, the findings have varied widely. In large measure, these differences reflect the many unknown aspects of the Saudi decisionmaking process. As with many other countries, the institutional linkages are fairly well documented, but we have scant information on the give-and-take among the key players involved in formulating policy. (For further discussion of the roles of Saudi leaders in formulating oil policy, see annex A.) The analysis of this dynamic policy process has been further clouded by salient and emotion-ridden issues (e.g., the Palestinians), by overemphasis on one criterion (e.g., revenue maximization), and by analytic fads (e.g., assuming that Iranian-style political instability would quickly spread).

Fortunately, time is a good teacher. Saudi decisions since the 1973 oil crisis provide evidence by which to judge how Saudi leaders weigh their various domestic and foreign interests. In this paper, we look at their major decisions on oil—i.e., on base prices, production levels, and productive capacity—and their perceptions of issues most likely to influence oil policy. The objective is to shed light on the motives that have affected, or could affect, the Saudis' decisions and to help separate their behavior from their rhetoric. Because Saudi oil policy involves a complex balancing of so many interests, the most we can do is to indicate the dominant concerns and the clearly evident threads of Saudi behavior.

#### A General Perspective

The interests of the United States and Saudi Arabia now converge to the point that the relationship between the two countries has become remarkably close, considering the potential points of friction. Saudi Arabia in recent years has pursued oil *pricing* and *production* policies much closer to those favored by

the United States than have most other OPEC members. In this respect, the Saudis have taken steps to hold down price increases and have avoided the use of their "oil power" to achieve political ends. By contrast, however, they have not expanded their oil productive *capacity* to the level the United States would have preferred.

These actions by the Saudis have not reflected any sense of altruism, but rather a perception that such policies serve their own interests, either directly or by eliciting the kind of response they seek from Washington. The interests the Saudis are most likely to have considered in making their oil policies are the following:

- An adequate flow of oil revenues to pay for their rising foreign outlays and to provide for some increase in foreign exchange reserves.
- Maximization of the long-term economic return on their vast oil reserves.
- Protection of their enormous foreign exchange reserves from seizure by foreign governments and from the ravages of inflation and oscillating exchange rates.
- Preservation of internal stability.
- Security of the Kingdom from external threats, including the Soviets, South Yemen, any spillover of the Iraq-Iran war, or even Western intervention.
- Settlement of the Arab-Israeli dispute and in particular the Palestinian issue, thus reducing a potential threat to Saudi security.
- Greater recognition of Saudi Arabia's power, globally and within the Arab and Muslim worlds, without becoming too prominent a target for those who would like to undermine the regime or to diminish its influence.
- Avoidance of criticism from major oil-exporting countries for not greatly expanding production and from LDCs for not substantially increasing financial assistance.

The first three of these are chiefly economic and business interests. They have received the most attention, in large part because they are quantifiable and thus more susceptible to analysis and precise debate than the other elements. In contrast, the other factors are unquantifiable, difficult to relate to Saudi energy policy, and subject to assessments that are highly dependent on anecdotes and assumptions about hidden political agendas. Despite their vague nature, however, these other factors have an effect on oil policy, partly because it is difficult to determine which prices and production levels are economically optimal anyway. In any case, these political and foreign policy considerations set the bounds of practical maneuver. Riyadh, for example, realizes that its security ultimately depends on the West and especially on the United States. It is partly to ensure that the United States will remain able and willing to provide a security umbrella that the Saudi leadership wants to help avoid global political or economic disasters and to avoid alienating Washington. In this regard, basic Saudi and US interests substantially overlap.

The next section looks at Saudi oil policy decisions since 1973 in the light of the factors that can be readily linked to those decisions. It examines separately the Saudis' short-term pricing/production moves and their longer term production capacity decisions. The final section explores how the unquantifiable factors could influence Saudi oil policy.

# The Record and Saudi Arabia's Economic and Business Interests

Oil Pricing and Production Policy. Saudi oil pricing/production policies have moved from being completely at variance with the interests of oil-importing states in 1973 to being much more consistent with them in recent years, at least in comparison with the policies of other oil exporters. When the Shah of Iran led the drive to push up oil prices during the 1970s, the Saudis were just becoming aware of their own vastly increasing role in international oil markets. Between 1970 and 1973, Saudi crude oil production capacity more than doubled; by 1973 the Kingdom was accounting for about 25 percent of OPEC productive capacity, as compared with about 15 percent in 1970.

Saudi leaders went along with the enormous price jumps because of the vast increase in oil revenues they created and probably because of their political aims regarding the Arab-Israeli conflict. Any inclination they may have had to restrain prices was significantly diminished by the predictions of many analysts that oil prices could not remain high for long in any event. Although it is now clear that oil prices would have risen substantially in the early mid-1970s because of market forces, the Saudis probably could have moderated the rate of price increase. They were unwilling, however, to halt immediately the production cuts that they stated were in reaction to the 1973 Arab-Israeli war. Their action helped maintain the large jump in prices to the point that it became accepted by the market. (Saudi official oil price trends are shown in the chart on page iv.)

Since late 1974, Riyadh has, with one major exception, seen price restraint as more advantageous than have other OPEC producers. Saudi Arabia's ability to moderate prices, however, has sometimes been constrained by global market conditions and by the limits of its own oil productive capacity. To back their price policies, the Saudis have at various times boosted production well above what they said was their "desired level" and the level that would have maximized revenue in the short run. In fact, during the 1979-81 period Saudi output exceeded preferred levels for a longer time than anticipated by most Western analysts, many of whom believed the Saudis would not long depart from the 8.5-million-b/d "desired" level. Thus, in hindsight Saudi behavior was not consistent with the belief, often attributed to them, that restricting production would maximize ultimate recoverability from the oilfields and minimize the political instability that accompanies rapid modernization.

<sup>1</sup> The "desired" level of 8.5 million barrels a day is an arbitrary and ambiguous number basically reflecting: (a) the known conditions of the oilfields and market perceptions in 1978 when the level was selected; and (b) a compromise among contending interest groups (for example, those Saudis wanting to keep more oil in the ground to meet the needs of future generations and foreign customers wanting to buy more Saudi oil). The "desired level" has allowed the Saudis to point to an output number above which they can say they are doing a favor for the oil-importing countries by producing more.

From late 1974 through 1978, Saudi leaders pressed for price freezes or somewhat smaller price increases than most other OPEC states and were reasonably successful, mainly because of the slack oil market, which their production decisions were instrumental in creating. They felt particularly strongly about their price position in late 1976, when they could portray their moderation as a gesture of accommodation toward a new US administration. From a financial point of view, the Saudis were easily able to accept a temporary decline in real oil prices because they were earning foreign exchange much more rapidly than they could spend it.

By late 1978, Saudi and US interests temporarily diverged as Riyadh's desire for price moderation seemed to wane. Oil revenues began to fall behind development outlays. Even though the Kingdom's foreign exchange holdings provided an enormous cushion and Riyadh could easily have borrowed vast additional sums, many Saudi leaders probably found it difficult to adjust to the stringent financial conditions after years of huge surpluses. It is possible although we have no evidence on this point-that these worries stemmed in part from the large number among the Saudi elite who were receiving a steady and substantial income from "agent" fees on development contracts with Western firms, and who feared that a cutback in development outlays would also lower these fees.

The prolonged falloff in Iranian oil output, however, quickly made any price decision academic. While initially the Saudis may have welcomed the resulting higher prices, and confused price and production signals from Saudi Arabia in fact added to the effects of the Iranian events, by the summer of 1979 they could do little to control the soaring prices.<sup>2</sup> By then they were producing at near capacity, as they continued to do until recently. They kept their own prices below those of other OPEC producers and, even after oil market surpluses began to appear, continued to pump at near full capacity in order to force the other

members of OPEC to reduce their prices to the Saudi level.

By early 1978 the Saudis were pushing within OPEC for a long-term pricing strategy, to include an automatic escalation of oil prices in real terms. They argued along with many economists that since energy shortfalls were expected in the near future, oil demand should be dampened through regular and predictible increases in the real price of oil. The Saudis also stressed that such an indexation scheme would avoid the highly divisive OPEC meetings that occurred each time prices were discussed. In addition, the Saudis probably saw the price scheme as a means of preventing financial "squeezes" on them similar to the one in 1978.

From the viewpoint of the United States and other oil-importing countries, the benefits of the oil price indexation scheme were highly dubious. While the price adjustment effort might help hold up prices during slack market periods, it would not prevent price surges during tight market periods. In any case, by 1981 Saudi Oil Minister Yamani temporarily shelved this favorite idea of his because he thought prices were already too high for the Saudis to maximize their oil earnings in the medium-to-long run.

Changing Western Perceptions. In the mid-1970s the consensus among Western analysts was that Saudi and US interests in oil pricing/production would remain highly divergent. Many analysts argued that the Saudis wanted to conserve their oil resources, as indicated by their statements on preferred limits on production. In terms of revenue optimization, the prevailing view was that oil prices would continue to rise for decades, and thus, it was believed, it made more sense for the Saudis to keep their oil in the ground. This view was bolstered by Saudi complaints about the negative real returns on their foreign investments and the losses they suffered from a depreciating dollar. Finally, it was argued that as a consequence of Washington's position on Arab-Israeli issues, the Saudi Government would be very hesitant to pursue

3

<sup>&</sup>lt;sup>2</sup> See annex B for a more detailed account of the controversial oil market behavior of the Saudis in the first half of 1979.

oil policies that might be interpreted as a favor to the United States.

Once it became clear in 1977 that Riyadh was pursuing pricing policies that resulted in limiting oil price rises, an alternative thesis of Saudi behavior began to be recognized. The new view was that Riyadh was following a path of "minimum regret" trying to reduce resentment of its policies among domestic and foreign groups. This meant using price moderation to demonstrate compassion for the suffering of the oil-importing countries. The aim, according to this view, was to reduce grievances and to achieve accommodation on other issues. The Saudi price policy, however, did not fully meet the "minimum regret" standard-it was surely "regretted" by other OPEC members. The Saudis persisted in their policy of price rise limitation well into 1977, even though it meant breaking ranks with most other OPEC members. A compromise with these other producers was reached only after the Saudis discovered they lacked sufficient productive capacity to force the others to reduce their prices to their level.

Since late 1980, many observers have accepted the often-stated Saudi view that high prices would seriously hurt Saudi Arabia's long-term oil-marketing potential. They argue that:

- The price hikes have increased oil conservation dramatically and have given new impetus to the growth of nonoil energy supplies. Oil price hikes have already approached or overshot the long-term equilibrium level, possibly leading to a reduction in the demand for, and value of, Saudi oil over the longer haul. Yamani himself has recently stressed this in several public speeches.
- The current depressed demand for oil, coupled with the potential for recovery in oil production in Iran and Iraq, raises the specter of sharply reduced demand for Saudi oil over the next few years, particularly if economic recovery in consuming countries falls short of current expectations.

Western observers have accepted the view that Saudi pricing policies will contrast sharply with those of most other OPEC members. The interests of these other producers lie in pushing up world oil prices as much and as soon as possible in order to maximize the present value of revenues from their rapidly depleting oil reserves. These countries most often need to achieve constantly higher oil prices to support their expanding spending habits and their large populations. They do not share the Saudis' long-term interest in holding down price increases in order to slow the development by consuming countries of alternative energy sources.

A Glimpse of the Future. The Saudis are likely to retain their interest in preventing economically disruptive surges in oil prices reminiscent of 1973-74 or 1979-80. Saudi interests could diverge from those of oil-importing nations, however, depending on market conditions and Riyadh's financial needs.

At present, Yamani and other Saudi leaders assert the need for stable prices (in effect falling real prices). They and many oil experts now believe the current surplus condition could persist at least until the mid-1980s—barring, of course, a political upheaval in a major oil-exporting state. The Saudis are likely to have sufficient foreign exchange to fulfill their development program and ongoing needs until 1984, even if prices remain at \$34 per barrel in current dollars, provided that production is at least 6.5 million b/d in 1982 and rises to 9 million b/d in 1984. This estimate assumes that the Saudis' foreign exchange outlay for merchandise, services, private remittances, economic aid, and private capital flows rises from about \$60 billion in 1981 to \$100 billion in 1984 (current dollars). Moreover, our analysis indicates that output as low as 6.5 million b/d would provide, at least through 1985, enough associated gas to meet planned consumption by the country's rapidly growing industrial sector as well as other needs. This range of "required" production approximates the level recently referred to by Yamani, although it is well above the minimum levels that have been asserted by Saudi

Table 1
Oil Production and Prices Required To Yield Needed
Saudi Revenues

Production (million b/d)	Price (US dollars per barrel)				
	1982	1983	1984		
10	22	26	31		
9	24	28	34		
8	28	32	39		
7	32	38	46		

officials as being sufficient to meet their revenue needs.

If a prolonged glut develops and creates strong downward price pressures, the Saudis would not find it possible to generate sufficient revenues to finance the foreign exchange level indicated above without liquidating some of their foreign financial holdings. Table 1 shows the prices and production levels required to yield such revenues, given the assumed foreign exchange outlays stated above. It indicates that even if the Saudis were producing at full capacity, for example, they would need \$22 per barrel next year and \$31 per barrel in 1984.

It is also possible that by the mid-1980s the current glut will end and the growing demand for oil will help drive up the price. Under such circumstances, the Saudis would probably favor significant oil price increases, although not comparable to past rounds of soaring prices. They recognize that major price moves cut into the long-term demand for their oil. As in 1979-80, however, Riyadh might lack sufficient excess productive capacity to control prices.

### **Productive Capacity**

Saudi Arabia has eschewed any major increase in its oil production capacity. Throughout most of the 1970s, the United States pushed the Saudis to expand their capacity as a means of meeting predicted increases in oil demand and preventing sudden and large price surges. In contrast, Saudi capacity targets

have been constantly pared (see table 2). Until the spring of 1977, Aramco's long-term plan envisioned reaching a total capacity of 16 million b/d by the mid-1980s. The Saudis, however, never formally approved this plan. It was not until 1977 that they attempted to operate their oilfields at their sustained capacity level, which was thought to be 12 million b/d. But they soon found they could produce only at about 10 million b/d, and even then only by severely straining the production facilities, as evidenced by two major explosions. Since the system had never been fully tested at that level for a sustained period, no one could have known the outcome. Once the problems became evident, the Saudis moved reasonably quickly to correct the deficiencies that could cause production to fall below 10 million b/d. They moved slowly, however, in expanding sustainable capacity. Although the stated goal for the mid-1980s was 12 million b/d, there is some evidence that even those Saudis considered the strongest supporters of higher productive capacity never seriously planned to reach this level. By the spring of 1981, in fact, they had cut back plans to less than 10.5 million b/d—that is, to a capacity about equal to the current level.

The failure of the Saudis to expand capacity in the 1970s cost the consuming nations dearly in 1979 when Iranian production collapsed; it may also have been a costly decision for the Saudis if, as has been noted above, the demand for Saudi oil falls well below desired levels in the next several years. Nevertheless, if oil demand fails to rise much over the next 10 years, the Saudis may not need more than the 10 million b/d. The danger will remain, however, that Riyadh will not have enough capacity to prevent devastating price runups during any further supply disruptions, especially if they coincide with a peak in the business cycle. Aramco had suggested a "snapback" production option, designed for production surges above the maximum sustainable capacity levels. The Saudis never approved the "snapback" plan and last year they formally rejected it.

Table 2

Aramco Plans for Oil Production Capacity

Plan	Target (milli	on b/d) Target Date
Fall 1979	12.2	1986
Spring 1980	11.7	1987
Fall 1980	11.6	1987
Spring 1981	10.3	1986

The rationale for Saudi behavior on productive capacity is quite murky. In view of their policy in 1974-78 and since mid-1979 to moderate price rises, it would seem that Saudi leaders would want increased capacity. Instead, however, they have argued for trimming production capacity plans for a variety of reasons:

- To reduce the pressure on Saudi Arabia to produce more. If the excess capacity were not available, foreigners would refrain from asking Riyadh to expand production.
- To stretch out available supplies well into the future.
- To hold down spending and the number of foreign technicians in Saudi Arabia.

It is also possible that some Saudi officials sought to trim Yamani's power by denying him an expanded oilfield investment budget.

In practice, Saudi actions on productive capacity seem to reflect a compromise based on all of the above factors and influenced by changing oil market conditions. The Saudis have not been forced to make immediate decisions on capacity, as they were in the case of productive levels and prices. Thus with many different foreign and domestic factions pursuing their divergent interests, the Saudis most likely took the path of least resistance. They announced plans, but did little to implement them. While satisfying some interest groups by stating a high capacity goal, Riyadh could also placate domestic elements desiring lower capacity.

#### **Unquantifiable Factors**

Several political and foreign policy interests are important enough to the Saudis to influence their oil policy. These include:

- Physical security of Saudi Arabia.
- The Kingdom's internal stability.
- Favorable resolution of the Arab-Israeli conflict.
- Protection of the Saudis' vast foreign assets.

Although these other interests would not all necessarily influence Saudi oil policy in the same direction, they have generally reinforced the tendency toward pricing and production policies that are also in Western interests. In addition, they have probably been important in preventing any repetition of the 1973-74 embargo and production cuts, inasmuch as the Saudis' interest in their physical security and preservation of their overseas assets (discussed below) would tend to deter them from any drastic actions that could antagonize the United States or sap US economic and military strength.

The effects of political interests on oil policy, although important, are unquantifiable and generally not directly observable. For the most part they have complemented, not conflicted with, the economic and technical considerations that also affect Saudi oil decisions. It is thus impossible to assess precisely the relative importance of each interest.

The only direct effort by the Saudis to use the "oil weapon" to achieve a political objective was in 1973-74, and even in that case the embargo and production cuts also served Saudi economic interests. The failure of those actions to attain their political objective probably led the Saudis to take a more realistic view of the limits and uses of their oil power. Also, with the fall of the Shah and the extension of Soviet influence in Ethiopia and South Yemen, their security situation worsened. Although these developments made the United States appear somewhat unreliable as a pro-

in Ethiopia and South Yemen, their security situation worsened. Although these developments made the United States appear somewhat unreliable as a protector, the Saudis' security options are few and some deference to US preferences has thus seemed prudent. A repetition of the 1973-74 experience now seems unlikely in the absence of a new Middle East war accompanied by US military assistance to Israel.

Although the Saudis' interest in their physical and financial security imposes significant constraints on their use of the oil "weapon," Riyadh might use its oil power in a more subtle fashion—that is, by suggesting that it would cut production or raise prices for political reasons, even if it did not really intend to do so. In particular, Saudi leaders will continue to voice concern about the shape of the Arab-Israeli settlement while hinting at the possibility of altering their "favorable" policies regarding oil exports to the United States and the rest of the West.

Arab-Israeli Conflict. Many Arabs believe that Saudi Arabia should employ the oil "weapon" if the United States does not show more sympathy for the Arab position on Palestine. Nevertheless, Riyadh itself probably sees little opportunity now to use oil as either a carrot or a stick to obtain a more favorable US policy on Arab-Israeli questions. The chief problem in Washington, from the Saudis' perspective, is not the lack of economic inducements but rather the power of the pro-Israel lobby in US politics and its ability to sway Congress even when the executive branch appears more cooperative. Given this view, there is little point in trying to reach a bargain with the United States that would link oil to Palestine. Use of the oil "weapon"—even if the Saudis' own economic interests did not argue against it—would entail uncertain payoffs and considerable risks.

Moreover, despite US backing of Israel and strong Saudi support for the cause of Palestinian Arabs, the United States and Saudi Arabia have some significant common interests regarding the Arab-Israeli dispute. Both states want to prevent this conflict from leading to:

- A new Middle East war.
- Arab-Israeli clashes in such hot spots as Lebanon,

- which can set back progress toward a political settlement as well as increase the danger of full-scale war.
- Further provocations by Israel, similar to its raid on the Iraqi nuclear reactor.
- Further provocations by Palestinian Arabs, which
  not only enflame the dispute with Israel but could
  also have repercussions among the 120,000 Palestinians residing in Saudi Arabia.
- Expansion of Soviet influence in the Middle East.
- Expansion of radical influence within the Arab world

There are also some significant differences in how Saudi Arabia and the United States perceive their interests in the Middle East conflict. In comparison with Washington, Riyadh is relatively more interested in the early restoration of Arab control over the occupied territories and less interested in the strength and security of Israel, whose culture and political values it does not share to nearly the same degree as does the United States. But whatever the disagreements over terms of settlement, the Saudis place high priority on resolving the conflict early because they see it dividing the Arab world, straining their own relations with other Arab states and with the United States, providing opportunities for hostile forces to gain influence in the Middle East, and ultimately jeopardizing Saudi security.

Riyadh has probably ruled out for the foreseeable future any open collaboration with the United States in Middle East peace diplomacy, because of US support for Israel, the opposition of most Arab governments to the Camp David process, and the Saudis' own doubts about the structure of the autonomy talks. Nevertheless, because Camp David is the only process currently offering any hope of a settlement and because of Saudi Arabia's other US ties, the Saudis have some stake in the success of US-led peace diplomacy and are unlikely to use oil policy to try to undermine it. A breakthrough in the autonomy talks—or any other demonstration that the road to Palestinian self-rule runs through Washington—would alleviate whatever discomfort the Saudi leader-

ship feels because of its close relationship with Israel's chief backer. The Saudis have already used their influence in modest ways that complement US peace efforts, as in helping to arrange a cease-fire earlier this year in southern Lebanon.

Security. The Saudis' strong concern with the physical security of the region and their country tends to deter, in two respects, use of the "oil weapon" against the United States. First, they realize that they are incapable of protecting their vast territory and believe it necessary to rely on the West, particularly the United States, as their ultimate defender. This is a major reason for Riyadh to avoid antagonizing Washington, on oil or on any other matter. The Saudi leaders probably expect that the United States would be less likely to support their regime if they abandoned their moderate policies on pricing and production and adopted ones that were less favorable to the West.

Second, the adoption of oil policies that threatened serious damage to Western economies would raise the prospect of a US takeover of the oilfields from Saudi control. This possibility now seems more remote than it did during the 1973-74 embargo and price hikes, but it probably remains as a concern in the back of Saudi minds.

Although Riyadh is constrained for both these reasons from taking any action that could seriously hurt US interests, it could make less drastic changes to its oil policy without losing the US security guarantee. Many Saudi security interests are US interests as well, including the prevention of Soviet domination of the Persian Gulf region, the protection of oil shipments through the Gulf, and the countering of any physical threats to Saudi Arabia and its oilfields. The United States could thus be expected to protect these interests to at least some extent even if Saudi oil policies became less agreeable to the West.

Internal Stability. Riyadh's concern with internal stability has an ambiguous effect on oil policy. Some within the Saudi leadership have contended that high

production levels endanger stability by encouraging rapid economic development and modernization. But it can also be argued that the modernization of Saudi Arabia has already gone so far, and those Saudis with a stake in high levels of government spending are so numerous, that to try to retard development would now be even more destabilizing than to accelerate it.

Foreign Assets. Protection of the Saudis' huge foreign assets is another reason for the Saudis to avoid punitive uses of oil policy. By the end of 1981 Saudi Arabia will have amassed more than \$125 billion in official assets, and many influential Saudis have been accumulating vast additional sums in their own accounts. A large portion of these funds is in the United States because capital markets in other countries cannot absorb them, because there are fewer restrictions on investments in the United States than elsewhere, and most of all because the Saudis view the political and economic climate in the United States as providing the safest haven for their money. Even many Saudi investments outside the United States are denominated in dollars—despite some recent Saudi efforts to diversify into nondollar assets—because the dollar remains by far the prime international currency. In all, the Saudis have about 70 percent of their official assets in dollar-denominated securities.

The Saudis' interest in minimizing risk and maximizing the return on their foreign investment portfolio restrains them in two respects from taking rash actions with regard to oil. First, their foreign holdings give them a large stake in the health of Western economies, which would be damaged by embargoes, deep production cuts, or steep price rises. Second, Riyadh would not want to anger the United States to the point that its assets might be frozen or otherwise become a means for US retaliation. As the Saudis discovered after the US moves against Iranian assets in November 1979, their ability to diversify quickly out of the dollar and out of investments in the United States is limited. A large switch in currencies could mean a substantial reduction in the value of their foreign holdings.

### Annex A

# The Saudi Oil Decisionmaking Process

In principle, the Supreme Petroleum Council, chaired by Crown Prince Fahd and including four ministrylevel technocrats-Yamani (Petroleum), Nazir (Planning), Aba al-Khayl (Finance), and Gosaibi (Industry and Electricity)—is responsible for recommending decisions on oil matters. In fact, informal conversations between individuals are the core of the process. Major or controversial decisions usually require a consensus among key members of the royal family. Consultations take place irregularly, discussions are informal, and no records are kept. As a result we do not know the positions held by various influential senior princes on the key oil policy issues. While Fahd apparently plays the major role in formulating oil policy, it is clear that his knowledge of oil matters is limited. On most questions Yamani would recommend a course of action to Prince Fahd for a decision. All decisions are relayed to the King for either information or concurrence.

High-level Saudi bureaucrats often have expressed diverse and frequently inconsistent reasons for holding various policy views. While these officials do not make the major policy decisions, their opinions undoubtedly reflect those held by some members of the royal family. Many Saudi officials, such as Planning Minister Nazir and Finance Minister Aba al-Khayl, still argue that Saudi production and pricing policies are not justified by the security, political, and economic returns received from the West. Since cutting production significantly would increase prices substantially, these officials presumably do not share the concern that Saudi oil could become overpriced.

#### Annex B

## The 1979 Episode

The most controversial occurrence regarding Saudi pricing and production behavior took place at the beginning of the oil crisis that was triggered by turmoil in Iran. When Iranian oil production plummeted in late 1978, the Saudis temporarily allowed output to increase to slightly more than 10 million b/d, a level above maximum sustainable capacity. In January 1979, however, the Saudis cut output back to a sustainable average of 9.5 million b/d, although upward price pressures were building (as measured by the spot market) and Iran was exporting no oil. In April, Riyadh cut back oil production to 8.5 million b/d. Spot prices continued to soar even though OPEC production was running at record levels. After two months during which spot prices approached \$35 per barrel, as compared with the official Saudi price of \$14.54, Riyadh increased output back to the 9.5million-b/d level and jacked up its official price to \$18.00 per barrel, as compared with the \$22.00 per barrel charged by other OPEC states. (See table 3.) It was too late, however, to hold down prices. Demand for crude oil needed to support both consumption and stocking outpaced supplies through the remainder of 1979 and well into 1980. It was not until a market glut began to appear initially in 1980 that the large differences in spot and official prices narrowed.

Some argue that Saudi behavior in early 1979 reflected a desire to push up prices, while others believed that these actions stemmed largely from uncertain market trends and mistakes in judging these trends. A case can be made for either explanation or even some combination of the two. The smaller January production cut by the Saudis may have been related to their anticipation of a rapid restoration of Iranian production following the end of an Iranian oil workers' strike, prudent reservoir management in the face of a supply disruption of uncertain length, or a desire to push up prices somewhat to ensure that there were adequate revenues to meet rising budget outlays. In any case, the overthrow of the Shah of Iran in January 1979 prevented a rapid restoration of Iranian production.

Increased market uncertainties arose when the Saudis temporarily cut back production sharply in late January as part of their normal operating procedures in order to meet their monthly 9.5-million-b/d target. During early January, Aramco produced and shipped oil at a rate that was higher than the planned average

Table 3
Oil Price and Production Movements, January-September 1979

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep
Prices (per barrel)								7 tug	Зер
Saudi price	13.34	13.34	13.34	14.54	14.54	14.54	18.00	18.00	18.00
Spot price	16.00	19.75	21.50	21.75	34.50	33.50	32.50	33.00	34.50
OPEC Production (million ba	rrels per day)						32.30	33.00	34.30
Saudi Arabia	9.5	9.5	9.5	8.5	8.5	8.5	9.5	9.5	9.5
Iran	0.5	0.9	2.3	3.9	4.2	4.1	3.9	3.7	
Other OPEC	18.9	19.1	18.8	18.8	18.8	18.6			3.7
Total	28.9	29.5	30.6	31.2			18.4	18.1	18.1
	20.7	27.5	30.0	31.2	31.5	31.2	31.8	31.3	31.3

rate for the month. It then cut back output during the last half of the month. This production profile was aimed at ensuring that the monthly rate would meet its target despite possible bad weather in late January. The press, however, reported the temporary production cutback as part of the government decision to reduce output to below fourth-quarter 1978 levels and thus further fueled uncertainty over future supplies.

Several reasons could have contributed to the Saudi decision to reduce output in April:

- Concern that maintaining output at capacity levels for an extended period might reduce ultimate recoverability.
- An unwillingness to produce oil to meet abnormal inventory demands.
- The restoration of Iranian output to about twothirds of prerevolution levels.

There remains, however, the question of why the Saudis delayed so long in going back to 9.5 million b/d. Again, some argue that the delay was intended to maximize short-term revenues while others stress

that the Saudis misjudged the market. Oil market experts in Saudi Arabia and elsewhere underestimated the size of the stock buildup that was taking place in oil-importing countries. This large-scale stock accumulation reflected continuing uncertainty about future supplies and prices. The level of exports from Iran was unpredictable and oil production signals being given by the major producing countries, especially Saudi Arabia, appeared uncertain. It is important to note, however, that this rapid building of inventories, which maintained pressure on prices, continued for months after Saudi Arabia began producing at the near capacity level of 9.5 million b/d. In any case, by late 1979 the Saudis were becoming increasingly concerned about the impact of soaring prices. This consideration dominated once it became evident the higher prices were causing a much greater than expected decline in oil demand and damage to the world economy.

